

I hereby certify that this correspondence is being filed via EFS-Web with the United States Patent and Trademark Office on January 26, 2010.

TOWNSEND and TOWNSEND and CREW LLP

By: Will Ce

PATENT

Attorney Docket No. 080422-000000US

Client Ref. No. 650944US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

ALEXANDER W. M. BAILEY

Application No. 10/550,239

Filed: September 23, 2005

For: PALLET

Customer No. 20350

Confirmation No. 2209

Examiner: Hanh Van Tran

Technology Center/Art Unit: 3637

APPELLANT'S BRIEF UNDER  
37 CFR §41.37

San Francisco, CA 94111

January 26, 2010

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Appellant herewith submits this Appeal Brief in response to the Final Rejection dated January 26, 2009. A Notice of Appeal was timely filed and received by the U.S. Patent Office on July 27, 2009, and an extension of time has been applied for in connection with the filing of this Appeal Brief.

The Commissioner is authorized to deduct the requisite extension of time and Appeal Brief fees, and any additional fees associated with this Brief and/or this application, to Deposit Account No. 20-1430.

## TABLE OF CONTENTS

1. REAL PARTY IN INTEREST .....	3
2. RELATED APPEALS AND INTERFERENCES.....	3
3. STATUS OF CLAIMS .....	3
4. STATUS OF AMENDMENTS .....	3
5. SUMMARY OF CLAIMED SUBJECT MATTER .....	3
6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	5
7. ARGUMENT .....	5
8. CONCLUSION.....	18
9. CLAIMS APPENDIX.....	19
10. EVIDENCE APPENDIX.....	22
11. RELATED PROCEEDINGS APPENDIX.....	23

### **1. REAL PARTY IN INTEREST**

The real party in interest of the present patent application is the inventor,  
Alexander W. M. Bailey.

### **2. RELATED APPEALS AND INTERFERENCES**

None.

### **3. STATUS OF CLAIMS**

Claims 2 and 4-19 are pending and are rejected. Claims 1 and 3 have been  
canceled.

### **4. STATUS OF AMENDMENTS**

No Amendment has been filed after the Final Rejection dated January 26, 2009.

### **5. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention is a pallet for supporting all kinds of objects, and in particular heavy objects, during storage and transportation. Such pallets are in extensive, worldwide use. The pallet of the present invention distinguishes itself from other pallets in that all of its components are easily replaced by suitably disassembling and reassembling the pallet, or for storing the pallet in its disassembled, compact form. The pallet is of light weight, high strength and durable in that it is not easily damaged, and since it is constructed of metal, it maintains its integrity over a long period of time, which render the pallet highly cost effective.

The pallet 1 defined by independent claim 18 has a top deck 5 and a bottom deck 10, both made of metal and spaced apart from each other, as best seen in Fig. 2. At least two longitudinally elongated bearers 15, each formed of sheet metal, extend transversely between the decks so that the top deck 5 is supported by the bottom deck 10, also as best seen in Fig. 2. (Paragraph [0019] of Substitute Specification attached to the Amendment filed January 17, 2007)

Each bearer 15 has first and second, longitudinally extending bearer portions 16, 17 secured to the respective decks 5, 10 that separately extend transversely between these decks. Each bearer portion 15 has a longitudinally extending top web 20 secured to the top deck and a longitudinally extending bottom web 25 secured to the bottom deck 10. A longitudinally extending central web 30 is generally normal to the decks 5, 10. Each bearer further has longitudinally extending inclined web portions 35 which secure the central web 30 to the top and bottom webs 20, 25, and each inclined web portion is inclined relative to the decks by an acute angle, as is described in paragraph [0019] and best seen in Figs. 1-3.

Independent claim 19 defines the pallet of the present invention in somewhat greater detail and, like independent claim 18, requires that pallet 1 has sheet metal top and bottom decks 5, 10 which are spaced apart from and generally parallel to each other, as seen in Figs. 2 and 3 and described in paragraph [0019] of the present application.

At least two elongated bearers 15 are positioned between the top and bottom decks of the pallet, and they extend lengthwise parallel to the top and bottom decks. Each such bearer has first and second portions 16, 17, a central web 30, and a bottom web 25. The bearer has inclined portions 35 that connect the top web 20 to the central web 30 and that further connect the central web to bottom web 25 at an acute angle as best seen in Figs. 1-3 and described in paragraph [0019].

The first and second portions of the elongate bearers 15 are aligned, and the first and second portions abut each other and are oriented perpendicularly to the top and bottom decks 5, 10 with the central webs 30 being releasably securable to each other with at least one fastener 40. The top and bottom webs 20, 25 of the first and second portions of the bearer are oriented generally parallel to the top and bottom decks 5, 10, the top webs abutting and being releasably securable to the top deck via at least one fastener 40. Likewise, the bottom webs 25 of the bearer abut and are releasably securable to the bottom deck 10 via at least one fastener 40, thereby releasably securing the top and bottom decks to each other and supporting the top deck on the bottom deck via the bearers, as described in paragraphs [0019] and [0020] and illustrated in Figs. 1 and 3. Further, the top and bottom decks 5, 10 and the first and second portions 16, 17 of

bearer 15 are all configured to be detached and replaced by replacement components as set forth in paragraphs [0023], [0028] and visible in Figs. 5a-5b and 8.

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Are claims 2, 9-14 and 16-18 obvious over PCT/AU85/00159 (Dash) and U.S. patent 1,360,720 (Brown)?

2. Are claims 4-8 and 15 obvious over PCT/AU85/00159 (Dash) in view of U.S. patent 4,240,360 (Sanders)?

3. Is claim 19 obvious over PCT/AU85/00159 (Dash) in view of U.S. patent 1,360,720 (Brown) and U.S. patent 4,240,360 (Sanders)?

## **7. ARGUMENT**

### **1. Background**

Pallets are relatively small, highly compact platforms which are extensively used to support heavy loads in the rough environment encountered during shipping and storing such loads. Pallets have a pair of spaced-apart decks, a lower deck resting on a support surface, such as the ground, and a top deck being spaced apart from the lower deck to provide space intermediate the decks for handling the pallet, typically with forklifts and the like, and the load carried by it. Leaving the space between the decks hollow, so to speak, is important to save weight and to make the pallet as light-weight as possible without sacrificing its load-bearing capacity.

Due to the heavy loads that pallets must carry, it is critical that the pallets have the required strength to withstand the loads statically, when the pallet rests on the ground, for example, as well as during movement or transportation of the pallet. It is therefore critical for pallets to provide spacers, or bearers (in the terminology of the present patent application), between the decks, which have the required strength and rigidity when supporting heavy loads, while being light-weight. It is further highly desirable that pallets can be repaired, when necessary in the field while supporting the load, to replace parts that may have been damaged during use of the pallet without having to replace the entire pallet, which necessarily requires

moving the load off the old and onto the new pallet, which might require a crane for heavy objects.

The pallet defined by the appealed claims is a pallet which meets these requirements and objectives and which has received wide praise and widespread use as a result thereof.

## **2. The Prior Art Relied Upon in the Rejection of the Claims**

### **a) The Dash patent (WO86/00866)**

Dash discloses a material handling pallet 10 made of steel for transporting heavy loads of goods (page 1, lines 2-17). The Dash pallet has a deck 11 and a base 12 welded to supports or bearers 13, each bearer consisting of two U-shaped channels 30, 31 that have central web portions which are secured to each other back-to-back and which extend parallel to the deck as best seen in Figs. 2 and 4 of Dash. Sloping legs 33, 34 connect the central web portions 32 of each channel to the respective end flanges 35. On the assembled pallet, illustrated in Fig. 2, the end flanges 35 (or, in the terminology of the appealed claims, the top and bottom webs) of one of the two channels engage the lower deck of the pallet, and the end flanges 35 of the other channel engage the top deck of the pallet. The central web portions 32 of both channels abut, are spaced from both decks, and extend parallel to the decks. Thus, neither of Dash's U-shaped channels 30, 31 contacts both decks, and the central webs 32 of both channels are parallel to the decks and not normal thereto, as required by the appealed claims.

### **b) The Brown patent (1,360,720)**

Brown discloses a metal bar which is "especially adapted for use as a spar in wings, fuselages, struts and the like in the construction of aeroplanes" (column 1, lines 13-16). The bar or spar is defined by a pair of mirror-image plates 1, 2, each of which has a flat intermediate or central portion 5, where the plates are joined to each other. Arms (not separately numbered in Dash) extend upwardly and downwardly, and their ends are formed by outwardly diverging extensions (not separately numbered in Dash). Outer, spaced-apart and corrugated plates 3 and 4 are secured to the diverging extensions of the bar, as is shown in all figures of Brown. The four plates 1, 2, 3 and 4 define the metal bar of Brown, and they "are all securely

tied together and sustain each other when stresses or strains are put upon the bar from any direction” (column 2, lines 73-76). The strains and stresses which the bars are to withstand, say, in the wing of an airplane, are not the result of heavy point loads applied to them, the loads to which pallets are subjected. Structural aircraft components must withstand tension, torsion, twisting and similar forces encountered in flight, forces that are completely different from the loads to which pallets used for storing and transporting heavy goods are subjected. As is well-known to any person familiar with air travel, aircraft wings carry special danger signs advising personnel not to step on certain portions of the wing because the wing and its components are not capable of carrying such point loads. To assure the integrity of the aircraft, all elements of the support spars of Brown are securely tied together, and they sustain each other when stresses or strains are put upon the spar from any direction to prevent its elements from becoming loose or separated under the constant vibration and shock to which aircraft structures are subjected. If an element of the bars could become separated, a dangerous situation would arise, which in the extreme could even lead to a crash if the support spars were to fail under the encountered operating conditions.

c) The Sanders patent (4,240,360)

Sanders discloses a “pallet” in the form of a single tray similar to a backing tray with nine protruding feet 11 that are arranged and configured so the pallets *per se* can be nested and stacked on top of each other, as shown in Fig. 29 and described in column 6, lines 10-14, a feature that is not relevant to the present invention. The Sanders pallet is not capable of supporting heavy loads, and the nine feet of its pallet apply pressure points to any goods that are stacked underneath the pallet when several pallets are stacked on top of each other. Sanders has no second deck that is spaced from the first deck by intervening bearers or supports, as required by the appealed claims.

**3. The Rejection of Claims 2, 9-14 and 16-18**

Independent Claim 18

Independent claim 18 requires, *inter alia*, a metal pallet with elongated bearers each “formed of sheet metal and secured to and extending transversely between the decks”, and

where “each bearer has a first and second longitudinally extending bearer portion, with each portion being secured to said decks and extending separately transversely between said decks and wherein each portion has a longitudinally extending top web secured to the top deck, and a longitudinally extending bottom web secured to the bottom deck, a longitudinally extending central web extending generally *normal* to said decks, and longitudinally extending inclined web portions securing the central web to the top and bottom webs ....”

In rejecting the claims over Dash and Brown, the Examiner acknowledged that the difference between independent claim 18 and Dash is that Dash fails to disclose that “each bearer has first and second longitudinally extending bearer portions, with each portion being secured to said decks and extending separately transversely between said decks and wherein each portion has a longitudinally extending top web secured to the top deck, and longitudinally extending bottom web secured to the bottom deck, a longitudinally extending central web extending generally normal to said decks, and longitudinally extending inclined web portions securing the central web to the top web and bottom webs, each inclined web portion being inclined to the decks by an acute angle, the central webs [being] releasably securable together”. (Final Rejection, page 3, first paragraph) This acknowledged difference between appealed independent claim 18 and Dash covers all claimed features of the bearers located between the top and bottom decks. Claim 18 was nevertheless rejected for obviousness by combining Dash with Brown, which discloses a bar or spar for structural airplane components which looks superficially similar to the bearer of the claim.

Thus, the only features of the pallet defined by claim 18 that are common to the teachings of Dash are its top and bottom decks and the need for bearers between them.

In *KSR v. Teleflex*, 550 US 398; 82 USPQ2d 1385, 1396 (2007), the Supreme Court held that

if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill .... [A] court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.



Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known ....

Thus, the Supreme Court further held at 1385 that

[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.

Although required by *KSR*, the Final Rejection contains no reason or reasoning why a person of ordinary skill in the pallet art would combine the pallet of Dash with support bars or spars for aircraft structures such as the wings of Brown. The Final Rejection also contains no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness as required by the above-quoted portions of *KSR*. The only reasoning for finding claim 18 obvious is the Examiner's assertion that "since both [Dash and Brown] teach alternate conventional supporting bar structure, used for the same intended purpose of load-supported [sic], thereby providing structure as claimed". (Final Rejection, page 4, last sentence of first paragraph) This is no reason or reasoning for combining Dash with Brown but a "mere conclusory statement" of obviousness which the Supreme Court in *KSR* held to be insufficient to support a holding that claim 18 is obvious.

Claim 18 is not obvious for this reason alone.

Further, a person of ordinary skill in the pallet art would not consider employing a support spar for aircraft structure, such as a wing, as the bearer between the decks of a pallet for carrying heavy objects. The person of ordinary skill in the pallet art would recognize that an aircraft spar is subjected to completely different loads and requirements than the bearer between the decks of a pallet, and that the engineering problems to be solved for the two are very different, a further compelling reason not to consider the spar of Brown as a substitute for the

bearers of Dash. Finally, the person of ordinary skill in the pallet art would recognize that the spars of Brown cannot be used on Dash's pallet in the manner in which Dash's bearers are used to support the heavy loads on its top deck.

At a minimum, it would be necessary for the person of ordinary skill in the art to discard the high load carrying arrangement of the bearers in Dash, where neither half portion of the bearer is in simultaneous contact with only one of the two decks, for the lightweight aircraft support spar, where both half portions of the bearer are in simultaneous contact with both opposing aircraft surfaces between which the spar is located. The person of ordinary skill in the pallet art would therefore necessarily be quite uncertain whether Brown's support bar could support a heavy load carrying top deck of the pallet of Dash, where the U-shaped channels are stacked one on top of the other between the decks. Such a concern is reinforced by Brown's need for a stiffening bar 9 alongside the support spar as disclosed in column 2, lines 59-62, a convincing demonstration to the person of ordinary skill in the pallet art that aircraft support spars for wings and the like would not be useable as supports between the decks of heavy load carrying pallets.

Under these circumstances, and pursuant to the holding in *KSR*, the difference in the purpose and function of an aircraft support spar as disclosed by Brown from a pallet of Dash is such that it would not suggest to one of ordinary skill in the art to completely revamp the positioning and orientation of the bearer in Dash so that it conforms to that disclosed in Brown, because the person of ordinary skill in the art would see no benefit of Brown's support bar to the function of the pallet in Dash. The person of ordinary skill will discard Brown, if he ever seriously considered it, and continue to use Dash for pallets.

In paragraph 7 on page 8 of the Final Rejection, the Examiner disagreed with Appellant's previous nonobviousness arguments that one of ordinary skill in the pallet art would not consider an aircraft spar for wings and the like when designing pallets and asserted that "it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention" and that both [references] are drawn to a load supporting panel construction having reinforcement/bearer

portions between spaced-apart panels/decks. Aside from being an inaccurate statement of what is disclosed by the two references, this is no more than a conclusory statement which pursuant to *KSR* cannot support an obviousness rejection.

Dash is directed to pallets, and Brown to aircraft (wing) support spars. Clearly, only Dash is pertinent to pallets, Brown is not.

Brown is additionally not relevant to whether claim 18 is obvious, irrespective of whether it is in the field of Appellant's endeavor, because Brown is not "reasonably pertinent to the particular problem with which the applicant was concerned", as required by *KSR*. The particular problem with which Appellant is concerned is the construction of a light-weight, high strength pallet in which each of the two portions of the bearer contacts both decks with longitudinally extending webs secured to the top and bottom decks, and has a longitudinally extending central web extending generally normal to the decks as required by claim 18.

The forces applied to wings and other aircraft structure components are far more complex than the reasonably straightforward compressive forces applied to pallets. A person of ordinary skill in the pallet art would not turn to literature concerning aircraft when attempting to improve heavy load carrying steel pallets because the two endeavors are unrelated, and Brown is not reasonably pertinent to Dash or the particular problem encountered by Appellant when he invented the pallet of the present invention.

Even if the foregoing were ignored, a person of ordinary skill in the pallet art would not follow the disclosure of Brown to modify Dash and thereby derive the invention defined by claim 18, since neither Brown, nor logic or the background of a person skilled in the pallet art, would adopt specific aircraft structure, such as the support spars of Brown, for load carrying pallets. There is no reason to believe that such aircraft spars would be suitable for supporting the upper deck of a pallet that must carry heavy loads, especially since Brown needs additional vertical stiffening blocks 9 between the insides of the upper and lower flanges of the bar (column 2, lines 60-62), which further suggests to the person of ordinary skill in the art that Brown's support spars are incapable of alone supporting the relatively light loads that might be carried by them.

In paragraph 8 on page 8 of the Final Rejection, the Examiner responded to Appellant's previous argument that there is no suggestion or motivation to combine the references, that he "recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art". The Examiner then held that the motivation to combine the references is "to provide a strong, yet light-weight supporting bar/bearer portion". This is not what claim 18 requires, is also not what the references teach, and is an unsupported conclusory statement that does not support a finding of obviousness pursuant to *KSR*.

The Examiner does not comment how the support spar of Brown would constitute a strong, light-weight bearer portion capable of supporting the heavy loads that must be carried by pallets, especially in light of Brown's need for stiffening blocks 9, and why the person of ordinary skill in the pallet art would consider Brown's spars with stiffening blocks desirable and/or useful for pallets.

The lack of substantiation for combining Dash and Brown in the Final Rejection suggests that the rejection is based on a hindsight reconstruction of the prior art by looking at the present application first to understand the present invention, locating references for selected components of the invention required by claim 18, and then combining the selected components as taught by the present application into an obviousness rejection. This is contrary to the law.

As held by the Federal Circuit Court of Appeals:

The quality of non-obviousness is not easy to measure, particularly when challenged years after the invention was made. That which may be made clear and thus "obvious" to a Court, with the invention fully diagrammed ... may have been a breakthrough of substantial dimension when first unveiled. *Interconnect Planning Corp. v. Thomas E. Feil*, 774 F.2d 1132, 1139 (Fed. Cir. 1985).

It is impermissible to first ascertain factually what appellants did and then view the prior art in such a manner as to select from the random facts of that art only those which may be modified and then utilized to reconstruct appellants' invention from such prior art. *Id.* At 1141.

The case law makes clear that the Examiner must show the teaching, motivation or reasoning to combine prior art references. This has not been done in the Final Rejection, and as a result no *prima facie* case of obviousness has been made out.

Additionally, Appellant notes that the elements of the claimed combination *per se* are quite old, and if combining those documents as suggested by the Examiner had been so obvious and therefore predictable, one would expect that it had already come into use in a field as crowded as the pallet field. Literally millions of pallets are used throughout the world every year, and new pallet designs are continually entering the market. No one has in the past suggested a pallet as defined by independent claim 18.

There are good reasons why the combinations suggested by the Examiner have not been adopted in the past. They would require significant modifications to the pallets and aircraft spars of Dash and Brown as discussed above, modifications that can be ascertained from the references only with hindsight.

Independent claim 18 is therefore not obvious over Dash in view of Brown.

#### Claim 2

Claim 2 requires that the central webs “are releasably securable together”, which is not taught by Dash either alone or in combination with Brown et al.

Dash discloses a fixed pallet where all components are welded together (see page 2, lines 9-14). They are not detachable from each other. The bearer 13 between the decks 11, 12 is made of two U-shaped channels 30, 31 that are welded together, and neither of them is in contact with both the pallet deck or pallet base (see page 4, lines 2-5 and Fig. 1). The invention defined by claim 2 is a multi-purpose metal pallet with first and second bearer portions that are releasably securable, or detachable, together. Pallets frequently become damaged during use; for example, the load to be carried may be dropped onto the pallet or the pallet may be driven into other structures while carried by a forklift and the like. Currently pallet owners incur significant expenses to replace damaged pallets. It is not normally economical to repair existing metal pallets; thus, in most cases, they are completely replaced when damaged.

The present invention addresses this problem by allowing a pallet owner to replace individual damaged components of a metal pallet rather than replacing the whole pallet, such as replacing the individual portions of the bearers that extend separately transversely between the decks, instead of replacing the entire bearer. This significantly reduces the maintenance costs and frequently prevents the need to replace the entire pallet. Dash does not show or suggest providing the pallet with detachable components, nor is there any recognition in Dash that this problem is addressed by the current invention and solved by releasably securing the central webs of the bearer to each other as required by claim 2, so that, for example, one portion of a bearer can be replaced while the other portion continues to support the top deck during the replacement operation.

There is also no reason to modify the structure of Dash so that it conforms to the present invention as defined by claim 2. A person of ordinary skill in the art faced with Dash would have no need to change the bearer structure; when all components are welded together Dash provides a very reliable pallet. If the parts of the pallet of Dash were detachable, the pallet of Dash could fail when its upper lower channels 30, 31 are detached, because the other channel then could not carry any load since it would be spaced from and no longer be supported on the bottom deck. In contrast, the arrangement defined by claim 2 retains a load carrying capacity during replacing one of the bearer portions because the other portion remains in supporting contact with the upper and lower decks during the replacement operation. A modification to make Dash include parts that are detachable would require a complete reconfiguration of the entire support structure for the upper deck because each of Dash's channels 30, 31 would have to be in simultaneous contact with both decks.

In paragraph 10 on page 9 of the Final Rejection, the Examiner stated with regard to the limitation "releasably securable together" that limitations from the specification are not read into the claims, such as claim 2 and others discussed below. Appellant never argued that this should be done.

However, as previously argued by Appellant, while limitations from the specification should not be read into the claims, the claims must be considered in view of the specification (see, e.g., MPEP 2111.01). Here, it is appropriate to consider how the term

“releasably securable” is defined or described in the specification in order to interpret its meaning in the claims. For example, paragraph [0023] describes that the pallet of the present invention has releasably securable components such that “all components can be disassembled and reassembled or damaged components easily replaced”. This disclosure in particular, along with the rest of the specification, provides a specific description of the meaning of “releasably securable” for the purposes of this application, which, Appellant notes, also conforms to the ordinary meaning of this phrase. The aircraft components of Brown are securely tied together to “sustain each other when stresses or strains are put upon the bar from any direction” (column 2, lines 73-76), as is critical for the function of an aircraft support spar and the safety of the aircraft itself. However, there is no teaching or suggestion in Dash or Brown to releasably securably attach any of the component parts to each other. Most any securing mechanism or fastening can be pulled apart or unfastened with the appropriate application of force and/or appropriate tools, as suggested in the Final Rejection, but that is not the same as two parts designed specifically configured to be releasably securable to each other.

In view of the foregoing, claim 2 is not obvious over Dash in view of Brown in its own right.

Claims 9-14, 16 and 17

These claims depend directly or indirectly from claim 18, and they are allowable because they depend from unobvious, allowable parent claim 18.

**4. The Rejection of Claims 4-8 and 15**

The claims, which directly or indirectly depend from independent claim 18, are directed to releasably securing the webs of the bearer between the upper and lower decks to the decks in a manner analogous to claim 2 addressed above, or to placing a sheet material onto at least one deck (claim 15) as well as to different fasteners that can be used. These claims were rejected because “Sanders teaches the idea of using releasable fastening means of rivets or removable clips for securing elements of a metal; wherein the releasable fastening means allows the pallet to knock-down for a spaced saving purpose [sic]. Therefore it would have been obvious to modify Dash by providing releasable [fasteners] ... since both teach ultimate

conventional pallet structure, used for the same intended purpose, thereby providing structure as claimed.”

One of ordinary skill in the art would not even consider the pallet disclosed by Sanders as a guide for reconfiguring the pallet of Dash that is adapted to support heavy loads. Sanders uses a baking tray concept with a horizontal deck that has a large number of components. The Sanders pallet has nine protruding feet 11 arranged to render the pallet stackable – a feature not relevant to the present invention. Moreover, in use, the nine feet apply pressure points to any goods that are stacked underneath the pallet when several pallets are stacked on top of each other, as shown in Figs. 28 and 29 of Sanders. There is no teaching, suggestion or hint in Sanders to secure first and second portions of the bearer to each other and to separately extend each portion transversely between the top and bottom decks, with central webs that are normal to the decks as required by the parent claim.

One of ordinary skill in the art would further not be motivated to combine Dash with Sanders, simply because, as asserted in the Final Rejection, “Sanders teaches the idea of using releasable fastening means of rivets or removable clips for securing elements of a metal ....” Dash discloses a fixed, welded pallet for carrying loads, while Sanders teaches to construct pallets that can be nested one on top of and inside the other as seen in Fig. 29 of Sanders. One of ordinary skill in the pallet art would see no relevance between the two, and if he were to combine Dash with Sanders, he would be unable to figure out which aspect of Sanders to include in Dash, or vice versa, so as to arrive at a pallet having bearers which are securable to the decks as recited in the present invention.

In view thereof, claims 4-8 and 15 are not obvious.

#### **5. The Rejection of Claim 19**

Independent claim 19 was rejected for obviousness over Dash in view of Brown and Sanders.

Claim 19 is directed to a detachable component metal pallet that has at least two elongate bearers between and extending lengthwise parallel to top and bottom decks. Each elongate bearer has first and second portions that are aligned such that their central webs abut



each other and are oriented perpendicularly to the top and bottom decks. Claim 19 further requires that each of the bearer portions is releasably securable to both the top and bottom decks and that the top deck, the bottom deck and the first and second portions are all configured to be able to be detached and replaced by replacement components.

Dash and Brown were applied against claim 19 in exactly the same way in which these references were applied against independent claim 18 as was discussed above. Claim 19 is not obvious over Dash and Brown for the same reasons why claim 18 is not obvious over these references, because claim 19 includes all limitations of claim 18.

The fact that claim 19 was further rejected over Sanders does not affect this conclusion, because Sanders was applied only against the limitation in claim 19 with regard to the “idea of using releasable fastening means [that] allows the pallet to knock-down [sic] for spaced saving purpose [sic]”. (Final Rejection, page 7, middle of page)

Further, even if claim 18 were considered obvious, which it is not, claim 19 additionally requires that the top and bottom webs of the bearers are “releasably securable” to the top and bottom decks, respectively, and that “the top deck, the bottom deck and the first and second portions [of the bearers] are all configured to be able to be detached and replaced by replacement components”.

These aspects of claim 19, which are limitations not present in claim 18, were held to be taught or suggested by Sanders, which was asserted to teach releasable fastening means, such as rivets or removable clips, which allows the pallet to be knocked down for space-saving purposes.

Sanders discloses a pallet in the form of a simple, two-dimensional tray fitted with downwardly extending, free-standing legs. Sanders does not have a bottom deck that must be secured to the top deck or tray.


Claim 19 requires that all components of the pallet, including the top and bottom decks, the bearers and the parts thereof, be configured to be detachable and replaceable with replacement components. The Final Rejection does not address this feature of claim 19, which is not disclosed or suggested by Sanders.

Claim 19 is therefore not obvious over Dash, Brown or Sanders, over and above the reasons why claim 18 is not obvious over Dash and Brown, because Sanders does not disclose, suggest or in any manner address the limitation of the last paragraph of claim 19.

## **8. CONCLUSION**

In view of the foregoing, Appellant submits that all pending claims 2 and 4-19 are not obvious. Accordingly, Appellant requests that the rejection of all claims be reversed.

Respectfully submitted,

  
J. Georg Seka  
Reg. No. 24,491

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 415-576-0200  
Fax: 415-576-0300

62411597 v1

## **9. CLAIMS APPENDIX**

Claim 1 (canceled)

Claim 2 (previously presented): The pallet according to claim 18, wherein said central webs of said first and second portions are releasably securable together.

Claim 3 (canceled)

Claim 4 (previously presented): The pallet according to claim 18, wherein said top and bottom webs are releasably securable to said decks.

Claim 5 (previously presented): The pallet according to claim 18, wherein said webs are releasably securable to at least one of said decks and each other by fastening means.

Claim 6 (original): The pallet according to claim 5, wherein said fastening means are threaded fasteners.

Claim 7 (previously presented): The pallet according to claim 5, wherein said pallet includes a plurality of holes for receiving each said fastening means.

Claim 8 (previously presented): The pallet according to claim 5, wherein said fastening means are rivets.

Claim 9 (previously presented): The pallet according to claim 18, wherein said pallet is of a generally rectangular configuration having a front edge, a rear edge and two side edges.

Claim 10 (original): The pallet according to claim 9, wherein at least one edge includes a cover plate.

Claim 11 (previously presented): The pallet according to claim 18, wherein at least one elongate bearer includes a stiffener.

Claim 12 (previously presented): The pallet according to claim 18, wherein at least one bearer includes an end cap.

Claim 13 (previously presented): The pallet according to claim 18, wherein at least one of said top and said bottom deck is of a profiled configuration.

Claim 14 (original): The pallet according to claim 13, wherein said profiled configuration are corrugations.

Claim 15 (previously presented): The pallet according to claim 18, wherein said pallet includes a sheet material secured to at least one said deck.

Claim 16 (previously presented): The pallet according to claim 18, wherein said pallet includes cavities for receipt of tines of a forklift or other handling equipment.

Claim 17 (original): The pallet according to claim 16, wherein said cavities are located on all sides of said pallet.

Claim 18 (previously presented): A metal pallet having:  
a top deck of sheet metal;  
a bottom deck of sheet metal spaced from the top deck;  
at least two longitudinally elongated bearers each formed of sheet metal and secured to and extending transversely between the decks so that the top deck is supported on the bottom deck; and wherein

each bearer has a first and a second longitudinally extending bearer portion, with each portion being secured to said decks and extending separately transversely between said decks and wherein each portion has a longitudinally extending top web secured to the top deck, a longitudinally extending bottom web secured to the bottom deck, a longitudinally extending central web extending generally normal to said decks, and longitudinally extending inclined web portions securing the central web to the top and bottom webs, each inclined web portion being inclined to the decks by an acute angle.

Claim 19 (new): A detachable-component metal pallet comprising:  
a sheet metal top deck;  
a sheet metal bottom deck spaced apart from and generally parallel to the top deck;

at least two elongate bearers, wherein the elongate bearers are positioned between the top and bottom decks such that they extend lengthwise parallel to the top and bottom decks, each elongate bearer comprising a first and a second portion extending lengthwise parallel to the top and bottom decks, where each first and second portion has a top web, a central web and a bottom web, and inclined portions connect the top web to the central web and the central web to the bottom web, where the inclined portions are inclined to the top and bottom decks at an acute angle;

wherein the first and second portions of the elongate bearers are aligned such that the central webs of each first and second portion abut each other and are oriented perpendicularly to the top and bottom decks, the central webs being releasably securable to each other via at least one fastener;

wherein the top and bottom webs of the first and second portions are oriented generally parallel to the top and bottom decks, the top webs abutting and being releasably securable to the top deck via at least one fastener and the bottom webs abutting and being releasably securable to the bottom deck via at least one fastener, such that the top and bottom decks are releasably secured together and the top deck is supported on the bottom deck via the elongate bearers; and

wherein the top deck, the bottom deck and the first and second portions are all configured to be able to be detached and replaced by replacement components.

Alexander W. M. BAILEY  
Appl. No. 10/550,239  
Page 22

PATENT  
Attorney Docket No. 080422-000000US

**10. EVIDENCE APPENDIX**

None.

Alexander W. M. BAILEY  
Appl. No. 10/550,239  
Page 23

PATENT  
Attorney Docket No. 080422-000000US

**11. RELATED PROCEEDINGS APPENDIX**

None.